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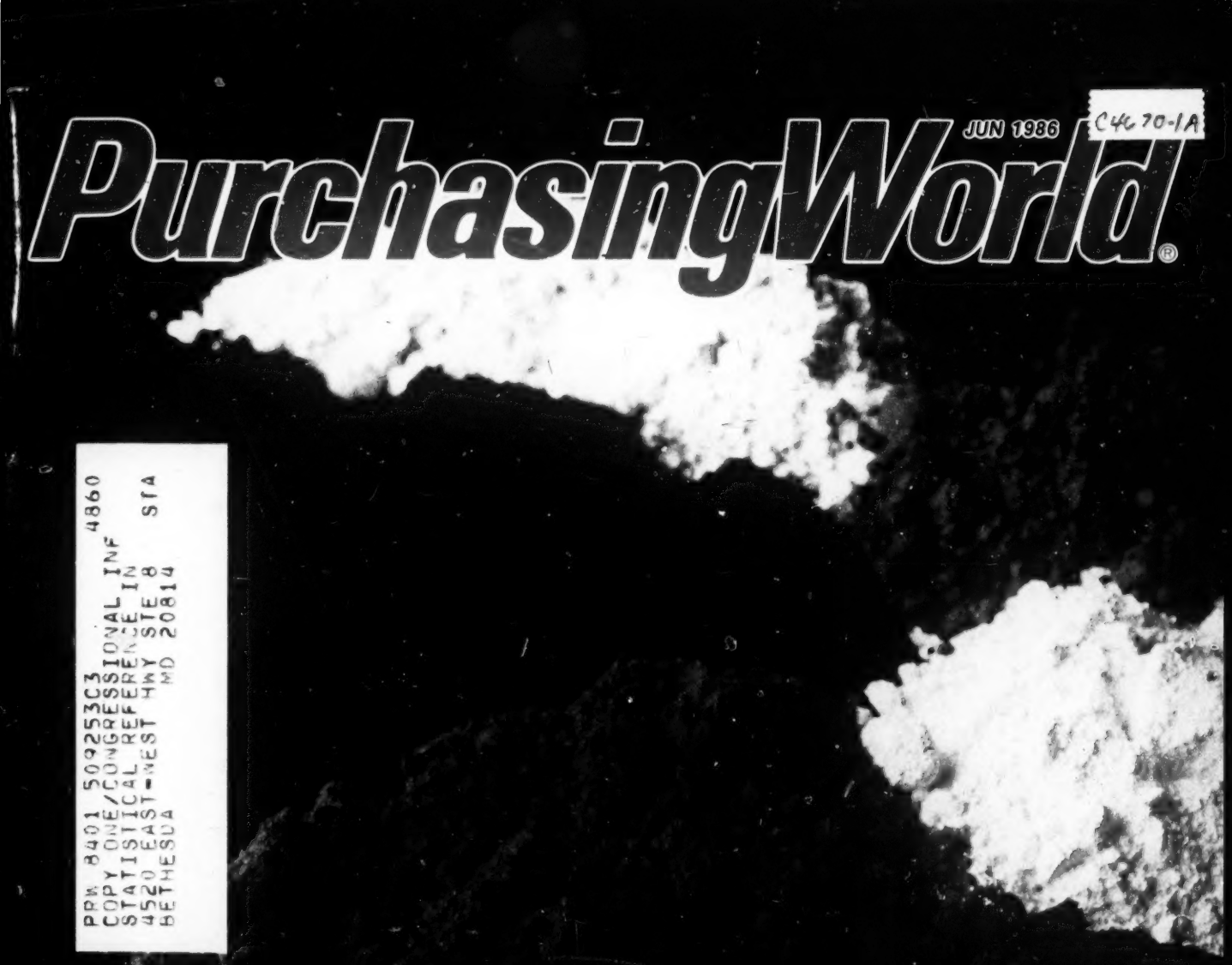

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New applications! Plastic is the "now" material of choice

N.A.P.M. report: Pitching in to get things done is new president's way

Personal computers: Let your database software do the expediting

Purchasing solutions come in a unique package from Xerox

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Helping you manage the business of buying

June 1986 Vol. 30 No. 6

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Cover photo courtesy of Borg-Warner Chemical Co.

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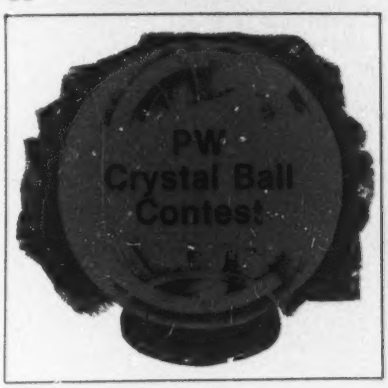

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PW PREDICTS

Oil declines mask some increases

The price declines of the past few months won't last much longer—quotes will begin to rise by early summer.

All the slippage noted over the past few months can be traced directly back to the sharp drop in oil tags. And while these energy quotes are not likely to rise, they are now about as low as they are going to go.

Equally important, these energy declines have been masking continued inflation in other sectors. A closer look a some of the nation's key price yardsticks makes this clear:

- **Producer prices:** March data shows the overall finished goods price index falling 1.1% on a seasonally adjusted basis. But eliminate oil, and the index is up 0.5%.

- **Cost of living:** Again using March data—a 0.4% decline in the all-inclusive index turns into a 0.3% increase when energy is removed. Some items such as foreign cars, insurance, and medical services are up a lot more than that.
- **Import prices:** Our heavy dependence on overseas oil really distorts this yardstick. While the overall import index dropped a hefty 6.1% during the first quarter of 1986, most key industrial sectors (excluding oil) actually sported big advances—4% in the case of machinery and transportation equipment and 3.8% for non-fuel raw materials.

In short, non-energy price performance isn't much different from last year—prices continue to creep slowly upward. This pattern should continue. There could be some modest uptick as the economy moves into the "mature" stage of the business cycle—a period when price hikes generally begin to accelerate.

And, the sharply depreciated dollar (down 30% *vis a vis* other currencies over the past year or so) also has to be factored into the price quotation. In fact, higher import quotes are already quite apparent, particularly in non-fuel items in the first quarter.

These import price hikes, in turn, must eventually effect the nation's general inflation rate. Right now, foreign goods account for 26% of the U.S market for all goods except farm and oil—double the share of a decade ago.

How much of an impact will this make? One rule of thumb is that each 10% decline in the dollar adds 1% onto the general inflation rate. Superimpose this on the 30% decline of the dollar to-date, and 3% will eventually be added onto the inflation rate.

Other factors could lift price levels as well. Labor costs, for example, are advancing at a 4% annual rate—while manufacturing productivity is increasing by only 1%. The implication is that unit labor costs are now probably increasing 3% a year.

While there is no reason to expect an inflationary spiral around the corner, modest prices are inevitable. A new nationwide *PW* survey seems to confirm this. PMs are now betting on a 2.5% average increase for 1986.

Econometric models suggest much the same pattern. Wharton Econometrics is currently projected at 3.3% increase in the overall GNP price deflator by the first half of 1987.

Industrial fastener forecast

Mechanical fastener markets, coming off a relatively buoyant 1985, can probably look forward to good-sized demand gains for at least another four years.

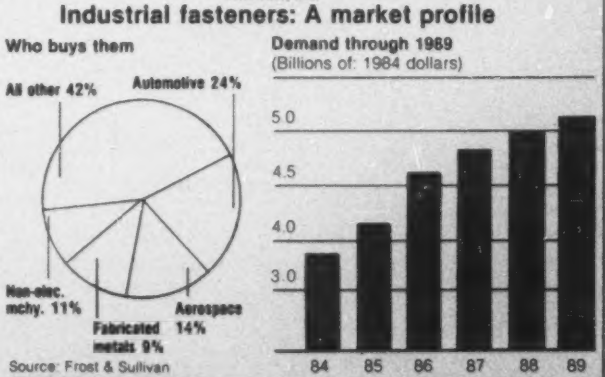
A new Frost & Sullivan study suggests that constant (1984) dollar sales of these fasteners (bolts, screws, nuts, etc.) will be rising at near a 6% annual rate through 1989. By 1989 these constant dollar totals could be up above the $5.1 billion level—far outdistancing the $3.8 billion figure of 1984.

Externally threaded fasteners will account for most of this volume. Bolts, growing at an 8% rate, will show the biggest gain since the industries using these types (heavy machinery and construction equipment) finally seem ready to snap out of their long recession.

On the other hand, internally threaded fasteners and non-threaded and specialty types show the poorest prospects. Gains will average out at only 3.5% annually. Several factors are behind this lag: continued competition from imports, the industry trend to eliminate nuts and special fasteners where possible, and the growing use of other joining techniques such as adhesives.

Here's a look at end-use markets: automotive (which accounted for 24% of total sales in 1984) will continue to be the biggest consumer—purchases will hit $1.2 billion by 1989. But aircraft/aerospace buys will approach $0.9 billion by 1989. Electronic industry applications will come in a close third.

Industrial fasteners: A market profile



Source: Frost & Sullivan

Textiles

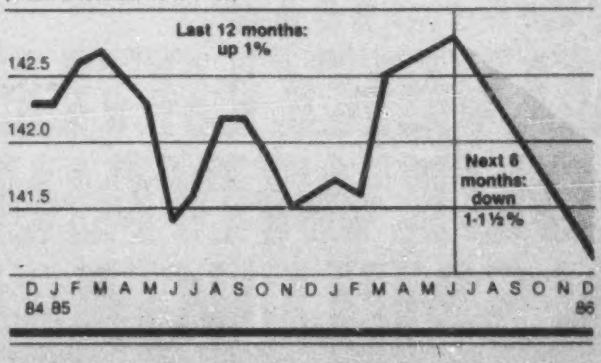
CURRENT SITUATION: Competitive pressures continue to put a lid on price hikes—overall industrial averages are up only 1% *vis a vis* a year ago. The major factor behind all the restraint is continuing import penetration. Despite a U.S. quota system, **incoming shipments are still arriving at a record clip.** Combined 1Q 1985 textile and apparel totals ran better than 25% above a year earlier on a square yard equivalent basis. Not surprisingly, domestic textile mill product output has remained flat since last fall.

DEMAND: Things could be looking up a bit. There has been a good amount of firmness in knits, prints, textured wovens, denims, and bed and bath fabrics. **And there are indications of somewhat better days ahead** as 1) pipeline inventories remain low, 2) rising personal incomes spur apparel buying, 3) a weaker dollar eventually has a positive impact on imports, and 4) consumers gradually react to the "Buy American" campaign. **Best bet: a 3% gain for 1986.**

SUPPLY: No problems here as overseas producers try to circumvent U.S. quotas to get rid of their capacity excesses. Domestic operating rates are fairly low, too—87% at latest report. And the industry has become a lot more efficient these days—thanks to recent mergers and the closing down of old plants. **Another plus for buyers: industry emphasis on what it calls "Quick Response"—an effort to reduce leadtimes.**

PRICE OUTLOOK: Increases seem remote despite a somewhat better second half demand outlook noted above. Reason: basic raw cotton tags could be off 10-15¢/lb by August when a new government pricing system drops domestic cotton fiber quotes to near the world level. This decline is almost sure to put downward pressure on synthetic fibers. **Best bet: Look for a modest drop of 1-1.5% by late summer or early fall.**

Textile mill product prices
(Index: December 1975 = 100)



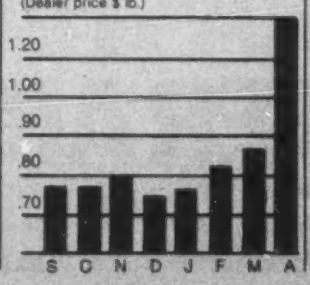
Aluminum

Some of the upward momentum of earlier this year has been lost. Signs of the time: 1) Merchant ingot has dropped a few cents over the past month, and 2) Common alloy sheet tags have been cut 5%. Behind the easiness: a lag in demand following earlier stockpiling against a possible strike. Nevertheless, the industry remains optimistic for the year as a whole— predicting a new all-time shipment high of almost 16 million lb. Another bullish sign: Imports could also begin to taper off as the weaker dollar makes incoming shipments a lot less attractive.

Cadmium

The plating metal continues to buck the general easiness of most other minerals. Recent merchant prices (as high as $1.40/lb) represent a major advance over the 75¢/lb low of late last year. Reason: somewhat tighter overall supplies and reduced inventories (producer and consumer stocks were down to 800 metric tons at the beginning of the year, less than half the levels of just three years earlier). Demand hasn't been all that bad either with 3,600 metric tons expected to clear the market this year, up about 3% from 1985 levels.

Cadmium
(Dealer price $ lb.)



Computer disks

Small (3½ in.) floppy disk quotes have dropped down to $1.40—about half the prevailing levels of two years ago. By next year prices could approach the $1 level—and 60¢ is a possibility by 1989-90. This, in turn, could spur a big increase in demand, especially now that IBM's PC Convertible uses these new small floppies. In any event, one research firm (Dataquest) sees sales topping the conventional 5¼ in. disks by 1990—when shipments of these smaller types are expected to top $300 million (vs. only about $50 million for 1986).

Lead

Prices have firmed up a bit to 19-20¢/lb up 1¢/lb from early spring. But a major rally is an unrealistic expectation as supplies are actually up and near-term demand can hardly be called rosy. Current forecasts, for example, suggest a rather flat U.S. consumption pattern—with use unlikely to top last year's estimated 1.24 million tons. But there are some longer run pluses, namely increased usage in asphalt and a possible step-up in Soviet buying to reinforce its nuclear plants against radiation.

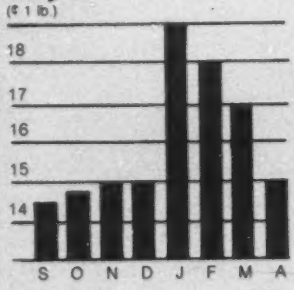
PW PREDICTS

Ethylene

Price erosion is still the order of the day. Recent contracts for the key petrochemical are around 15¢/lb or slightly lower—far under the 19¢/lb January high. One key reason: the sharp decline in ethane feedstock costs which, at latest report, were near 15¢/gal, some 10¢/gal under the previous quarter's quote.Supplies do remain fairly snug, but this, too, could change as 865 million lb a year of previously shut down capacity is restarted.

Ethylene

(¢ / lb.)



Zinc

The plating and die casting metal is becoming a bit more buoyant these days. Domestic producer prices, for example, have moved up 2¢/lb in recent weeks—with similar increases reported in the European market. One big factor: increased use of galvanized steel to prevent rust in new model cars. But don't expect any major advance. Capacity is more than adequate, and new production will be coming on-stream next year. Then, too, automakers are pressuring producers to sell on a cost-plus basis, removing any possibility of any big supply-demand inspired price surge.

Semiconductors

The industry finally seems to be coming out of its year-long slump. Book-to-bill ratios (orders relative to sales) for Free World producers have jumped to 1.15—far above the 0.75 level of most of 1985. Prices, too, have recovered—with averages up 3-4% over late 1985 levels. And the general uptrend is expected to continue. Dollar sales gains for 1986 should range anywhere from 3.5% (the In-Stat estimate) to the 13.6% estimate of Henderson Ventures. Whatever the final gain, it marks a major change from 1985 when totals fell by more than 20%.

Copper

The red metal still seems incapable of sustaining any significant rally. Not even the threat of a summer mine strike here in the U.S. seems to be making much difference— there is apparently plenty of good quality metal available. Some modest price increases—maybe enough to propel the metal into the low 70s range—are possible later on this year. But that should about do it as U.S. demand does little more than equal last year's level and Free World consumption moves up only about 1% to 7.35 million metric tons.

Steel

CURRENT SITUATION: Year-to-date demand hasn't been that bad. Shipments in the first half will be up a million tons or so. Flat-rolled prices, reflecting January boosts, are also moderately higher than a year ago. A second round of boosts ($12-20/ton) in May have failed to hold, but prices are closer to lists which were dropped to more realistic levels at the beginning of the year. **Right now, most flat rolled steel sold on a spot basis is moving for only $10/ton under published lists.**

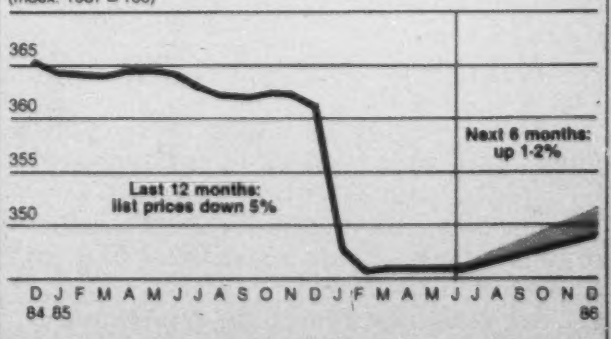
DEMAND: Some near-term weakness seems to be developing because part of the early 1986 advance may reflect hedge buying against possible strikes this summer. **And, some of steel's top markets are sluggish**—auto demand could be off by 5-10% this year and oil country goods are not doing any better. Capital spending surveys do suggest that machinery could be up fractionally, and construction may also post some modest gains, **but the consensus is that shipments will stay at an unimpressive 72.7 million tons.**

SUPPLY: Despite fairly brisk demand, operating rates are still low. 128 million tons of melting capacity will still remain after Wheeling-Pittsburgh, Inland, and some small steelmakers shut down unused plants. Strikes look highly unlikely, and overseas producers are ready and willing to make up strike shortfalls that might occur.

PRICE OUTLOOK: Near-term advances over the 3-4% increases posted in January are unlikely. Price inhibitors include 1) expected leveling off in steel wage boosts (one econometric firm actually sees a wage decline for 1987), and 2) still-strong bargaining positions of big consumers who have locked in lower-than-market prices. **Look for small 1-2% increases over the next six months.**

Steel mill product prices

(Index: 1967 = 100)



Import prices

Recent sharp declines in import prices are misleading. While overall averages fell 6.1% over the latest 3-month period, it was all due to tumbling oil quotes. Without considering oil, the figure actually shows a 3.4% increase over levels of three months ago.

The rise in non-oil sector prices is no surprise. It's now an ongoing trend—with these prices also up 2.3% over the previous quarter. It reflects the hefty 30% decline in the value of the U.S. dollar over the past year or so relative to other major currencies.

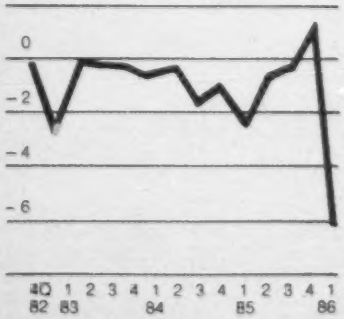
The overall advance over a year ago is 6.6%. And some sectors such as machinery and transport equipment are up 10% over the past 12 months.

Here's a more detailed rundown on all major categories—comparing latest figures with those of just three months earlier:

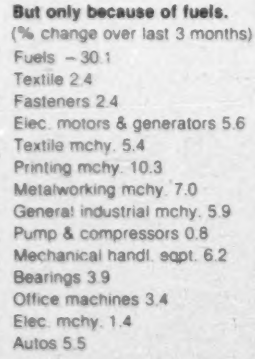
- **Fuels:** Averages were down a resounding 30% in the first quarter—with quotes now at their lowest levels since mid-1979. The drop wasn't limited to oil—natural gas fell 4.3% from late 1985 levels.
- **Chemicals:** A small 0.4% rise is noted for the first quarter. But pharmaceutical products surged 6.4% because of exchange rate shifts involving the German mark and the Japanese yen.
- **Machinery and transport equipment:** A new 4.0% first quarter advance follows closely on the heels of a 3.6% 4Q 1985 rise. Metalworking equipment viewed separately was up 7.0%—with sizeable boosts also noted for industrial machinery (6.9%), road vehicles (4.8%), and office machinery (4.8%).
- **Raw materials and components:** 1Q advances were registered in bearings (3.9%), in metal manufactures (2.3%), textiles (2.4%), fasteners (2.4%), and paper and paperboard products (0.4%). But non-ferrous metals slipped 1.2% on a continuing global oversupply.

Import price trends

Overall prices are falling again



But only because of fuels.
(% change over last 3 months)

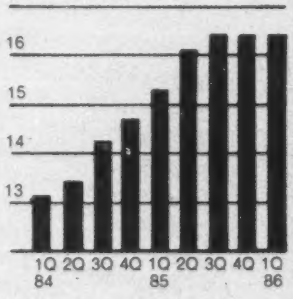


Real estate

It's still a buyer's market. Industrial vacancies have risen to 5.3%, up nearly a point over the last year and a half. Most dramatic near-term increases were in St. Louis, Indianapolis, Phoenix, and north and central California. Office space also remains in excess—with 16.5% of downtown square footage seeking occupants. Make that 20% in Denver, Miami, New Orleans, Oklahoma City, Phoenix, San Antonio, San Diego, San Jose, and Tampa. Suburban office vacancies are even higher (22.5%).

Office vacancy rate (%)

(Downtown areas)



Paper

Linerboard prices are averaging nearly $280/ton—up some 17% from January's $240/ton low. And the upcreep should continue—with tags moving back up to about $320/ton by year-end. This should put some upward pressure on corrugated shipping containers. And while they haven't firmed yet, advances of 2-3% are likely by the fourth quarter. And by next year they could move up more significantly, with overall box averages up by as much as 6-7%.

Methanol

Prices continue to tumble on a combination of oversupply and still-retreating feedstock costs. In any event, there's a lot of distressed material seeking a home—enough that prices have dropped about 4¢/gal since January. Gulf Coast bargeloads, for example, now command only 34-35¢/gal—and in some case even less if you are willing to take immediate delivery. Middle East imports should also continue to be directed toward U.S. shores, as alternate deliveries to Europe fetch only 25-27¢/gal.

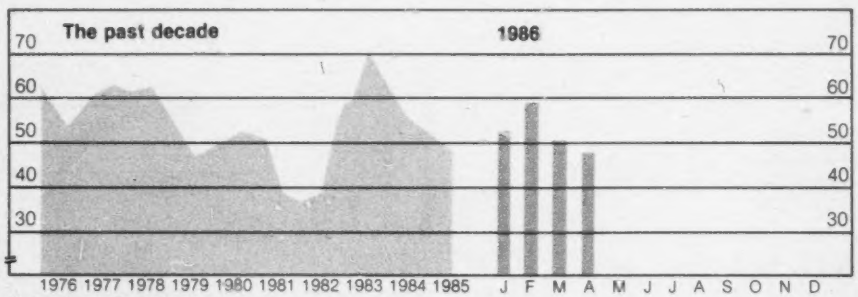
Styrene

A combination of factors—including the oil price tumble, rising imports, and new sellers entering the market—has exerted downward pressure on prices. Quotes are down near 19¢/lb—about 6¢/lb under recent January peaks. And even this doesn't tell the whole story. Some reports indicate, for example, that big volume (100 million lb) buyers are getting material for under 16¢/lb. On the other hand, demand remains quite respectable. The industry expects to produce 7.6 billion lb this year—up slightly from last year's 7.4 billion lb.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



Source: Commerce Dept.

KEY ECONOMIC TRENDS

Feel frustrated? Slow growth will do it every time

Current talk in the media and elsewhere about the sagging economy notwithstanding, business is still solidly in the plus column and is likely to remain there for at least another year or two.

Why the confusion? Basically it stems from disappointment, namely that the hoped-for "mini-boom" following the oil price slide has failed to materialize.

Recent results, for example, suggest that the second quarter GNP advance will be pretty much in line with the first quarter's lackluster 3% gain (annual rate).

In a sense, this slow-growth trend may not be all that bad. As one business analyst recently put it: "Slow growth may be frustrating, but it's a pretty sure guarantee against excesses. The economy will finish 1986 in the plus column—The overwhelming odds are that the following year (1987) will be the fifth consecutive year of economic growth."

Most economists, both in and out of government, seem to agree that there's precious little to worry about over the quarters immediately ahead. And they cite some pretty impressive evidence.

For one, interest rates are falling. The prime rate is under 9% for the first time since the late 1970s.

And this is translating into lower mortgage rates which at latest report were down to 9.9% (30-year fixed rates)—more than three percentage points under year-ago levels. This decline, if nothing else, would seem to assure another good housing year.

Lower interest rates also make it easier for consumers to borrow. The drop in car loan rates is a case in point. And if Detroit pursues its 7% and 8% special financing deals, car sales are likely to pick up significantly in the second half of the year.

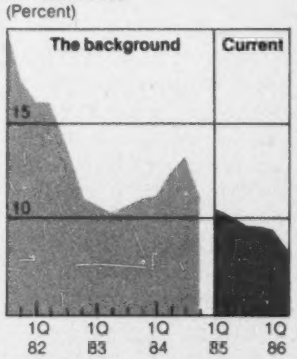
Consumers, themselves, also seem a lot more willing to spend. Thus plans to buy autos, homes, and major appliances climbed to a record high in April (the latest available month).

All this, in turn, should keep the savings rate low. Consumers are currently saving only about 4.5% of their take home pay—far less than the 6-7% of a few years ago. And given rising incomes, this should be enough to assure some sizeable gains in both durable and non-durable categories in the months and quarters immediately ahead.

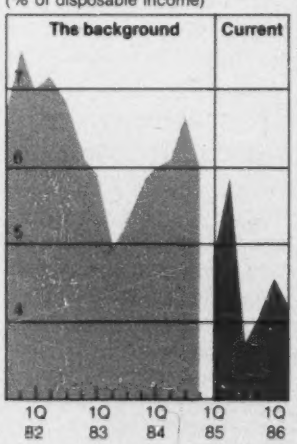
Nor does the above exhaust the list of positive factors propping up the economy. Other major pluses would have to include 1) the stimulating impact of another big federal deficit, 2) the weakening dollar, which by fall or winter should finally begin to stem the import tide

Leading indicators

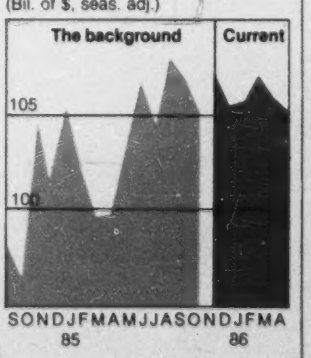
1. Prime rate
(Percent)



2. Savings rate
(% of disposable income)



3. Durable goods orders
(Bil. of $, seas. adj.)



(and hopefully stimulate exports as well), and 3) relatively tight inventories on all levels of trade.

Inventories under control of PMs are especially trim. A new government report, for example, puts the durable purchased material stock-sales ratio at only 0.50.

New orders have tapered off a bit. But much of this can be attributed to the dropoff in the petroleum sector and the uneven pace in military procurement.

Conclusion: Industrial production, which showed some minor declines in recent months, should soon begin to turn up again. *PW*'s forecast here: a 2% increase in second half manufacturing output—or about 4% annual rate.

Operating rates mired in low 80s

Good news on the availability front. The nation's factory operating rate remains mired in the relatively low 80% range.

That's well above the recession lows of a few years back as charted here. But it's also about five percentage points under the 85% cut-off point that most economists think separates a buyer's from a seller's market.

Moreover, there is little sign of any near-term rise to this cut-off point. In fact, the average has actually been slipping a bit in recent quarters, not because output is down, but rather because new capacity continues to come on stream.

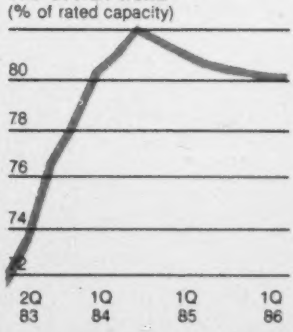
Over the past four quarters, for example, capacity has advanced by some 2.9%. But output over the same period rose only 1.6%, resulting in operating rates slipping about 1%.

True, the slippage may be over. But given current second half production forecasts, it's highly unlikely that this key measure of purchasing leverage will move up much.

Equally significant, the excess capacity is pretty well spread out over most key industrial sectors. As the chart below suggests, there is only one industry in the 90% plus range, and that's paper where mills are operating at 93.3% of their potential.

Factory operating rates: still no sweat

The overall trend
(% of rated capacity)



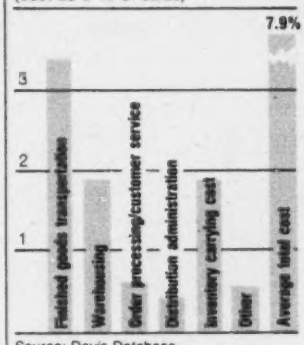
Latest industry readings
(% of rated capacity)

Stone, clay, glass	82.3
Steel	70.8
Nonferrous	83.1
Fabric-metal products	80.6
Nonelectrical machinery	71.8
Electrical machinery	69.5
Automotive	75.7
Aerospace	86.0
Instruments	82.0
Textile products	87.0
Paper & products	93.3
Chemical & products	90.2
Petroleum products	89.1
Rubber & plastic products	86.0

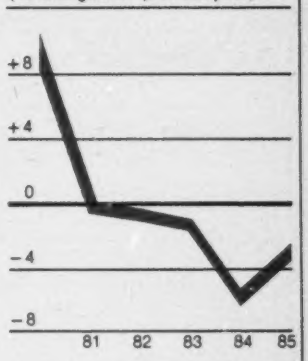
Source: Federal Reserve Board, PW Estimates

How distribution costs shape up

Actual 1985 outlays
(cost as a % of sales)



The long-term trend
(% change from previous year)



Source: Davis Database

But even this is hardly worth becoming concerned with—since paper firms normally prefer to operate at close-to-full capacity. The biggest glut is now in the machinery sector where both nonelectrical and electrical equipment groups are operating at only 70%.

Distribution costs dip

A growing number of firms are making solid progress in cutting physical distribution costs to more reasonable levels.

New national averages (prepared by Davis Database, a New Jersey-based consulting firm) suggest that outlays for such services as transportation, warehousing, and for carrying inventories have been falling relative to sales for five straight years.

The result has been a cost/sales ratio at near 8%—about one percentage point under 1980 levels. That's not an insignificant change. Indeed, for a firm grossing $10 billion a year, the savings are close to $100,000.

But cost declines, particularly in the past year, have been selective rather than across-the-board—centered in just three categories (finished goods transportation, inventory carrying costs, and order processing/customer services).

The implication: There is room for still more improvement, particularly in warehousing and distribution management. Moreover, there have been important changes in distribution over recent years that offer myriad new opportunities. Deregulation of carriers, improved energy efficiency, better inventory planning technologies, and warehouse automation—all these offer substantial potential for further cost cutting.

Another important finding of the new study is that not all firms have shared in these recent savings. While 44% of surveyed companies were able to reduce their cost/sales ratios last year, some 20% reported higher ratios, with the remaining 36% noting little change.

CURRENT PRICES

Prices down, credit sagging oil tags

Chalk up another month of steady-to-lower industrial prices—at least as far as overall averages are concerned.

And once again the lion's share of the credit must go to the sagging oil market as the declines of previous months continue to filter down to refined petroleum products and other energy-related areas.

The energy impact can probably best be appreciated by looking at the "energy" price index (bottom chart). At latest report it was running a hefty 18% under year-ago levels.

But looking ahead, there are signs that these fuel and power costs may be ready to bottom out. Gasoline quotes, over the past few weeks, for example, have halted their free fall. And this should show up in next month's *PW* producer price rundown. Indeed, average tags could actually rise a bit here—reflecting the approach of the summer driving season.

As for most other product lines, the current picture remains basically mixed. This is clearly evident in metals. On the upside are lead, zinc, calcium, vanadium, and mercury. But all this is being offset by failures of recent price hikes to hold in flat rolled steel products and common alloy aluminum—plus there have been some actual declines in cobalt, molybdenum, selenium, bismuth, and manganese.

Similar diverging trends are noted in other key sectors, too. Thus price increases in some building materials (notably lumber and plywood) have been effectively balanced out by continued easiness in cement and asphalt roofing.

The situation is similar in chemicals. Prodded by lower feedstock costs, many petrochemicals and plastics have been falling. But some of the inorganics such as chlorine have been firming.

Finally, machinery prices on average have actually been moving up a bit. But the increases are likely to remain modest. A new government survey suggests that overall 1986 increases will only be on the order of 1.5%—thanks to relatively small material and labor cost increases

This month's breakdown

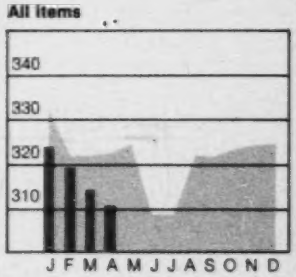
	Latest level (Apr.)	% change from: Month ago	Year ago
Bearings	354.2	0.2	2.0
Bolts, nuts, etc	275.4	−0.9	−0.9
Chemicals, inorganic	295.7	0.2	−1.6
Chemicals, organic	353.0	−2.2	0.1
Concrete products	325.4	−0.1	3.0
Corrugated cartons	263.8	−0.1	−8.0
Cutting tools, small	289.6	0.1	1.6
Electric lamps (bulbs)	351.5	0.6	3.2
Electronic components	200.1	0.4	0.7
Fans and blowers	363.0	0.2	1.5
Foundry and forge products	364.8	−0.1	0.6
Fuel oil (residual)	665.5	−12.0	−40.2
Furniture, commercial	315.4	−0.2	3.6
Gasoline	371.3	−21.5	−28.1
Glass, flat	229.5	−0.1	3.9
Glass containers	388.5	0.3	3.9
Gypsum products	351.1	−3.1	4.4
Hand tools	382.2	0.4	3.0
Hand tools, power driven	235.9	0.6	2.0
Industrial furnaces	394.9	−0.2	2.9
Integrating and measuring instruments	234.8	−0.4	1.2
Internal combustion engines	349.6	0.2	2.9
Lubricating oil	381.4	0.2	3.0
Lumber millwork	313.7	0.6	1.1
Material handling equipment	295.3	0.0	0.4
Metal containers	361.2	0.0	0.9
Metal mill shapes (nonferrous)	307.0	0.1	−1.3
Metal tanks	304.9	−0.3	−0.4
Motors and generators	349.3	−0.1	−0.1
Motor trucks	307.3	0.4	4.2
Office and store equipment	153.9	−0.8	0.3
Paperboard	266.1	1.3	−6.9
Paper boxes and shipping containers	265.7	−0.2	−4.1
Paper office supplies	236.9	−0.1	−1.5
Paint	280.0	0.4	1.8
Plastic resins	300.8	−0.1	−1.8
Precision measuring tools	268.3	1.1	2.6
Pumps and compressors	357.9	0.2	0.5
Refractories	373.2	0.1	1.7
Rubber belts and belting	337.5	−0.6	−4.5
Scales and balances	231.6	0.4	0.7
Steel products	345.4	0.1	−5.1
Switchgear	283.6	0.4	0.7
Textiles, synthetic fibers	151.5	0.7	−3.2
Textiles, gray fabrics	151.0	−0.3	−0.7
Tires and tubes	236.5	−0.3	−1.0
Transformers and power regulators	234.4	0.1	−0.2
Welding equipment	299.2	0.1	2.2
Wire and cable	206.5	0.0	1.8

Industrial prices

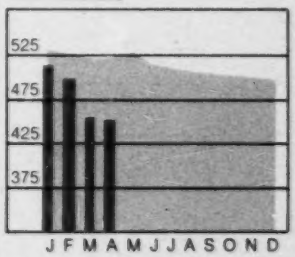
(Index: 1967 = 100)

1985 ■ ■ 1986

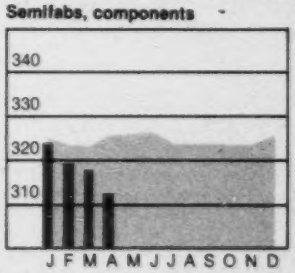
All items



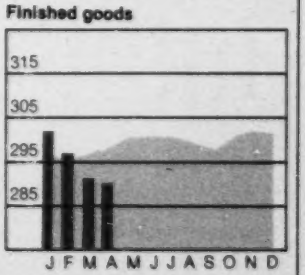
Raw materials



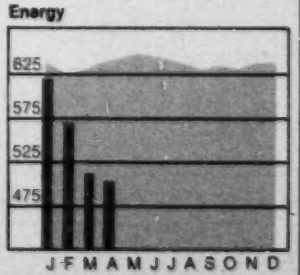
Semifabs, components



Finished goods



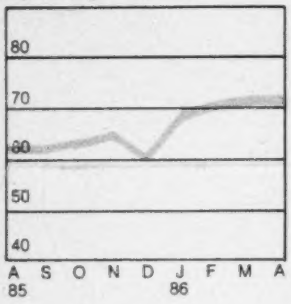
Energy



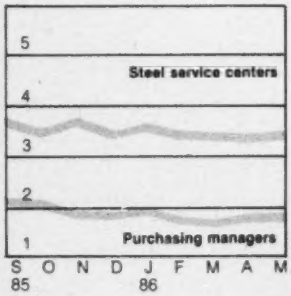
Source: Bureau of Labor Statistics

Steel

Operating rates

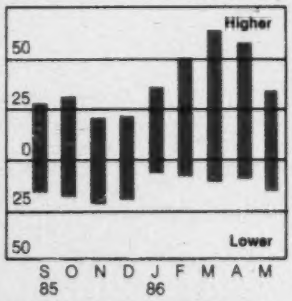


Inventories
(Months supply on hand)

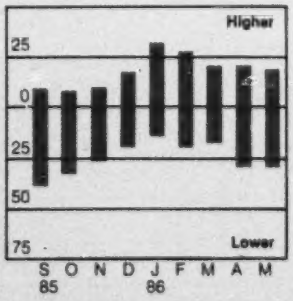


Demand
(Percent of respondents)

Service centers incoming orders



Steel buyer purchase



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

and a quite low 70% operating rate.

This machinery projection is also pretty much confirmed by new Wharton Econometrics forecasts which suggest only a 1.2% increase for capital goods this year. But there will be some acceleration as the year wears on with second increases viewed separately in the 2.5% range.

Add the above to the end of energy price declines—and all signs now seem to be pointing to resumption of increases in industrial price averages, albeit at a very modest rate. *PW* projections here: increases in the 2-3% range through the rest of the year.

STEEL SCENE

Steel aplenty, demand level

There's good news on the price front—the nation's steel distributors have reduced their estimates of near-term boosts.

A new Steel Service Center Institute (SSCI) survey shows that only 65% of the respondents anticipate higher metal replacement costs by fall, compared to 88% last month. And some 10% now feel that tags may actually be lower six months from now—double the 5% who saw the likelihood of declines last month.

Why the big change in thinking? One reason could be that a second boost in 1986 on flat rolled products has failed to hold. Another factor could be that order estimates are being toned down a bit in line with the nation's rather lackluster factory performance.

On this latter point: Only 35% of today's distributors anticipate an increase in new billings over the next few months. That's not much more than half the 59% who were predicting gains in orders a month earlier.

One recent SSCI estimate for overall 1986 confirms this more cautious thinking. It puts estimated distributor shipments this year at 20.6 million tons—a shade under the record 21 million tons that cleared the market in 1985.

Commenting on all this, Andrew Sharkey, SSCI president, notes that "although nationwide daily shipping rates continue strong, many parts of the country are experiencing a decline in general business conditions."

On the other hand, service centers seem determined to hold onto as much of the steel market as possible. To improve their flexibility, they are now leasing rather than buying additional equipment. Most of the capital spending planned for the year will go for upgrading equipment to meet customer needs better.

Also high on the list of distributor priorities are plans to beef up computer information systems. More and more of them are upgrading links so customers can have improved access to their product mix.

But there is just so much that service centers can do to keep business in an uptrend. Reason: Overall steel demand doesn't seem to be going anywhere. The latest NAPM steel buyers survey, for example, finds that more PMs now expect a drop in steel purchases (from both distributors and mills) over the next three months. The actual number predicting a decline (30%) far exceeds the 18% who expect an increase.

Part of the demand lull could be due to tighter inventory controls rather than reduced consumption. Specifically, steel buyer and service center holdings are put at under two months and three-and-a-half months, respectively—both under year-earlier readings.

But this latter appraisal should be taken with a few of grains of salt. Reasons: 1) Steel consumption will be level rather than down this year, and 2) stock/sales ratios for many are now pretty close to rock-bottom levels

One thing that almost everyone seems to agree on is that import quotes remain below comparable domestic levels. Three out

Import prices
(Compared to domestic)

Steel buyers

ABOVE 9%
SAME 30%
SLIGHTLY BELOW 58%
SUBSTANTIALLY BELOW 3%

Service centers (carbon)

ABOVE 0%
SAME 39%
5-10% BELOW 61%
10-20% BELOW 0%
OVER 20% BELOW 0%

of five service centers buying carbon steel say overseas material is cheaper.

Buyers, who lump all kinds of imported steel together, tell much the same story—with 61% noting import price breaks.

And this price advantage is expected to continue—buyers say there will be little change in import dependency over the next six months.

There still seem to be very few availability problems. Only a handful, for example, see any snugness developing over the next six months. And this snugness is only in one area—coated sheet.

PROCUREMENT STATUS

Some slowing, but not to worry

There has been some growing evidence of some modest leadtime stretchouts over the past few weeks. Therefore:

- *PW*'s exclusive leadtime index has held in the "51" range for the second straight month—suggesting that slightly more items are extending than are coming in.
- NAPM's speed-of-delivery survey reveals slower shipments by 7% of respondents—more than offsetting the 5% who reported some speedup. For the *PW* index, this marks the second straight month of fractional deterioration.
- A slight uptick is noted in the number of PMs committing 90 days or more in advance for their production materials—16% at latest report vs. 12% a month earlier.

But purchasing executives are unanimous in their appraisal that there is little to worry about. They feel that any recent increases in delivery times have been due to supplier reluctance to carry sufficient inventories rather than to any underlying capacity problem.

Not only is American industry producing at a relatively low 80% rate, but the percent of capacity figure has actually been declining in recent months. Also reassuring: Every single major sector is producing at or under its preferred level.

Two other signs that things are still pretty much under control: 1) the absence of items on the NAPM short-supply list, and 2) the continuing decline in buyer inventories.

On the latter score, some 24% reduced their holdings over the latest reported month—almost twice as many as the 14% who noted some accumulation. That this is happening when strikes are possible in steel and nonferrous metal attests to the fact that no one is really worried.

Where do we go from here? The consensus is that the current slight leadtime stretchout will end by late spring as suppliers fine-tune their production schedules to meet a slow steady growth pattern into early 1987.

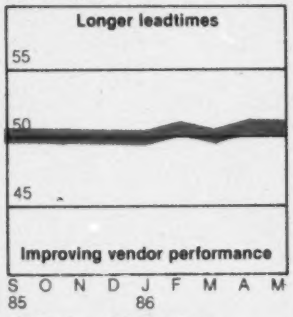
That's not to say there won't be a few problems. Some electronic components are almost sure to get a bit tighter—but this will be the exception rather than the rule.

As one Pennsylvania PM puts it, "the buyers' market is here to stay. And on the outside chance that domestic suppliers can't meet our needs, there are plenty of overseas people who are ready, and willing to fill the breech."

Monthly procurement status report

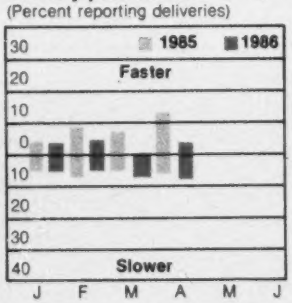
Leadtime index

A "diffusion" index based on 158 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.



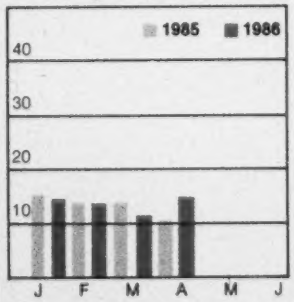
Delivery performance

(Percent reporting deliveries)



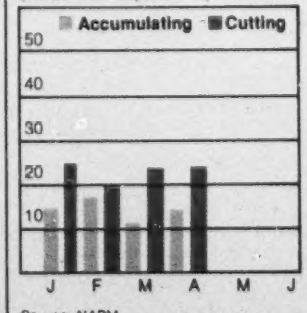
Forward commitments

(% committing 90 days or more in advance)



Inventory strategy

(Percent of respondents)



Source: NAPM

Leadtimes and availability

Chicago: A mixed picture in steel—hr sheet is in a bit (to 4-5 weeks) but coated galvanized sheet is out (to 7-8). Brass and copper have stretched to these weekly waits: special sheet and coil (3-7), special rods (6-9), and wire (8). Chlorine is out (½ to 1).

Cleveland: Status quo here with these typical weekly waits: paint (2), plastic resins (2-3), cold finish aluminum (8), alloying materials (on demand), softwood lumber (3), waterproof papers (4-5), plastic shrink film (on demand), corrugated (2-3), and steel canisters (1).

Los Angeles: Modest stretchouts to these weekly leads: brass castings (6-8), corrugated cartons (4-6), domestic fasteners (6-8). No changes in foreign fasteners (12-16), galvanized steel (12-14), aluminum tubing (6-8), grey iron castings (8-10), and linear ICs (30).

Houston: Some slight extensions are reported in shop-fabricated carbon steel pipe (to 2-6 mo.) and structural steel (3-5 mo.). But high

BUSINESS DATATRAK

pressure heat exchangers have inched in (to 4-8 mo.). No changes in other long-lead items such as motor control centers (3-7 mo.), and power transformers (4-7 mo.).

Philadelphia: Standard fasteners have moved out (stock to 6 weeks). Specialty types remain unchanged at 8-10. Some stretching in PC boards is also possible by 4Q—to over 10. Little change elsewhere with these weekly waits: std. bearings (stock to 4), std. pumps and valves (8-10), electric motors (12).

Pittsburgh: Most nonferrous metals are holding steady at 2 weeks, except for large orders of tin (6) and mill quantities of fabricated copper (6). Other prevailing leads: steel trapping (2-3), paint (4-5), paper bags (4-6), drums (1), and plastic packaging (2-3).

Leadtimes (in weeks)

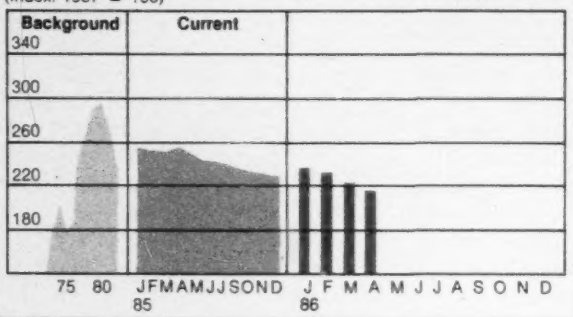
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4	4
C-R Sheet (Chgo)	7½	7½	7½
Plate (Phil)	3½	3½	3½
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	5½	5½	5½
H-R Bars (Chgo)	4	4	3
Cold-Drawn Bars (Phil)	5½	5½	5½
Galvanized (LA)	13	13	7
Galvanized (Chgo)	7½	6	7
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	17	17	17
Tubing (Phil)	5½	5½	5½
Grey Iron Castings (LA)	9	9	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	17	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	11	11	11
Motors (Phil)	10	10	10
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	9	9	10
Relays (Chgo)	15	15	15
Resistors (Chgo)	9	9	9
Resistors, Wirebound (Phil)	5	5	5
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	1½	1½	3
Plywood (Chgo)	1½	1½	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	2	2	2
Softwood (Phil)	⅓	⅓	⅓
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	4	1½
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	2½	2½	3½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2	2
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1

	Now	Month ago	Six months ago
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	2½	2½	2½
Cartons, Corrugated (Hous)	2	2	2
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	6
Shrink Film (Clev)	1	1	3½
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	1	1
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	13	13	11
Aluminum Plate (Chgo)	12	12	10
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	12	12	9
Brass Castings (LA)	7	5	5
Brass Rods (Chgo)	7½	6½	5
Brass Sheet (Chgo)	5	4	5
Brass Tube (Chgo)	8	7	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	7	7
Copper Tube (Phil)	5½	5½	4½
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	2	2	1
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	2	2	2
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	5	5
Fasteners, Std. (Phil)	2½	1½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	21
Heat Exchangers, Hi-pressure (Hous)	26	26	33
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	1½	2½
Pumps (Hous)	24	24	24
Pumps (LA)	11	11	11
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

Raw material price barometer

(Index: 1967 = 100)

Latest month	219.7
Month before	223.1
Year ago	257.1



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	23.90	23.90	25.10
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	23.95
Steel, bars, Pitts., cwt.	23.95	23.95	23.95
Steel, bars, C.R., Pitts., cwt	31.00	31.00	29.25
Steel, plates, Pitts., cwt.	18.25	18.25	23.25
Steel, plates, H.R., Pitts., cwt.	18.25	18.25	23.25
Steel, sheets, C.R., Detroit, cwt.	25.90	25.15	27.10
Steel, strip, C.R., Chi., cwt.	36.18	36.18	35.30
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	.595	.613	.520
Antimony, in alloy, lb.	1.35	1.35	1.35
Beryllium-copper, cost ingot, lb.	5.35	5.35	5.35
Brass, red, 85%, [sheet], lb.	1.32	1.32	1.32
Brass, yellow, [sheet], lb.	1.27	1.27	1.27
Cadmium, ton lots, lb.	1.30	1.15	0.95
Copper, electrolytic, wire bars, refd., lb	.68	.68	.69
Copper sheet, over 24 in., lb.	1.41	1.41	1.41
Lead, common, N.Y., lb.	.190	.190	.200
Magnesium, pig ingot, [99.8%], lb.	1.53	1.53	1.48
Mercury, 20 fl. lots, N.Y., fl.	253.00	265.00	293.00
Molybdenum, oxide, dealer, lb.	2.75	2.65	4.12
Nickel, cathode, dealer, lb.	1.90	1.86	2.47
Platinum, dealer, oz.	412.00	402.00	282.00
Silver, N.Y., oz.	5.23	5.17	6.28
Tin, Straights, N.Y., lb.	2.62	2.70	5.48
Zinc, Prime West, East St. Louis, lb.	.33	.33	.45
Zinc, die casting alloy, No. 3, lb.	.415	.415	.515
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	850.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.40	16.35	16.25
Shipping sacks, ton	390.00	390.00	440.00
Solid bleached paperboard, ton	550.00	550.00	600.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.237	.228	.352
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.045	1.045	1.040
Cotton middling, 1", N.Y., lb.	.645	.630	.602
Printcloth, 48", 80x80, N.Y., spot, yd.	.68	.65	.63
Army duck, 37", 13 oz., yd.	1.48	1.48	1.70
Blended printcloth, 64", 78x54, yd.	.80	.72	.70
20s combed yarns	2.05	2.05	1.95
Wool tops, N.Y., lb.	2.00	1.80	2.10

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	.395	.395	.455
Ammonia, anhydrous, tanks, Gulf Coast, ton	100.00	100.00	N.A.
Benzene, petroleum, tanks, Houston, gal.	.74	.67	1.51
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.58	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks; lb.	.91	.91	.86
Methanol, sny., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.52	.52	.54
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.270	.270	.305
Polyethylene resin, low density liner film grade (market place), lb.	.325	.345	.280
Polypropylene, homopolymer grade (market price), lb.	.345	.370	.330
Polystyrene, general purpose grade (market price) lb.	.32	.33	.35
Polyvinyl chloride, pipe grade (market price) lb.	.285	.305	.310
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.21	.21	.26
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	157.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	66.86	56.85
Titanium dioxide, anatase, reg., carlots lb.	.73	.73	.69
Xylene tanks, gal.	1.36	1.36	1.36
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	326.40	307.20	302.25
Lumber 2x2 pine, mbf, cl	323.60	305.25	299.95
Plywood, plyform, ¾", msf, cl	598.70	590.60	566.95
Plywood, ¾", msf, cl	389.40	381.20	367.85
Cement, bulk, ton, tl	65.69	65.84	64.76
Sand, ton, cl	6.57	6.46	6.24
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	47.45	48.33	47.64
Crushed stone, 1½", ton, cl	7.98	7.92	7.62
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.83	0.83	0.80
Gypsum sheathing, ½"x1"x8", msf, tl	217.87	213.87	207.94
Brick, common, per thousand, tl	186.91	186.71	180.28
Asphalt paving, AC-20	162.69	167.53	175.64
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.07	7.07	7.24
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	8.50	10.50	22.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	14.75	16.50	28.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	.603	.585	.860
Gasoline, 94 oct., reg., Chi., tank car, gal.	.545	.435	.818
Heating oil, No. 2, Chi., bulk, gal.	.453	.490	.775
Heating oil, No. 2, N.Y., bulk, gal.	.483	.450	.800
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.50
Jet kerosene, gal.	.420	.400	.715
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.290	.290	.355
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	71.00	74.00	72.00
Steel, No. 1 hvy., dlvd., Chi., ton	73.00	73.00	67.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	.585	.580	.570
Copper, No. 2, East, wholesale, dlvd., lb.	.505	.500	.460
Brass, red, East, wholesale buy, dlvd., lb.	.545	.540	.530
Brass, yellow, East, wholesale buy, dlvd., lb.	.300	.300	.330
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.340	.390	.290
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.370	.415	.320
Zinc, old, East, wholesale buy, dlvd., lb.	.150	.150	.140
Lead, clean solids, East, wholesale buy, dlvd., lb.	.108	.105	.110
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	12.00	15.00
Paper, old corrug. box, dlr., N.Y., bon	12.00	12.00	10.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	.100	.110	.100
White wipers, No. 1, dlr. buy., f.o.b. N.Y., lb.	.120	.125	.260

[Sources: Metalc Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

PMS pull back reins on prices

The nation's top industrial purchasing managers are reducing their overall procurement cost estimates for 1986.

Results of a new nationwide *PurchasingWorld* survey suggest only about a 2.5% average increase for the current year. That's more than half a percentage point under increases that were anticipated at the beginning of the year when a similar survey was conducted.

And there could be a lot of buyers who fare even better than average—a substantial number are talking about only 1-2% advances. And 8% of respondents are even hoping to hold the price line at or under last year's levels.

In any event, this year should not be very different from 1985. Answers to another survey question confirm this conclusion. Specifically, the 21% of respondents who expect bigger price hikes this year is pretty much offset by the 17% who expect smaller boosts. Equally significant are the 62% who anticipate very little change.

Reduced energy cost pressures have certainly played an important part in this rosy price picture. But there are other forces operating too. "Don't forget the continuing buyers' market," adds one Midwestern PM, who goes on to cite such price-inhibiting factors as very modest demand gains, ample or more-than-ample capacity in most lines, and a continuing influx of cheap imports.

Some of the more specific findings from the just-completed *PW* survey:

The oil impact: More than two of every five respondents say this is having a substantial effect. These same PMs put the overall acceleration caused by energy at 1-2%.

Sector-by-sector variations: As might be expected, the energy price advance is expected to be quite low—only around 1.5%. Similar small increases are seen for freight and office equipment. On the other hand, raw materials, component parts, and machinery are all expected to advance by 3%.

Areas of extreme weakness: Tags under 1985 levels are deemed possible in such product lines as tubing, selected plastic resins, petroleum products, natural gas, petrochemical feedstocks, computers, and printers.

Bigger-than-average price boosts: Items cited here include steel, aluminum, platinum, selected electronic components, liability insurance, paper products, abrasives, lumber, and some imported machinery lines.

But whatever the individual trends, purchasing executives say that they mean to fight price increases whenever possible. One of their key strategies: shifting an increasing share of their orders to fewer and fewer suppliers—a move which they feel may give them a lot more bargaining leverage.

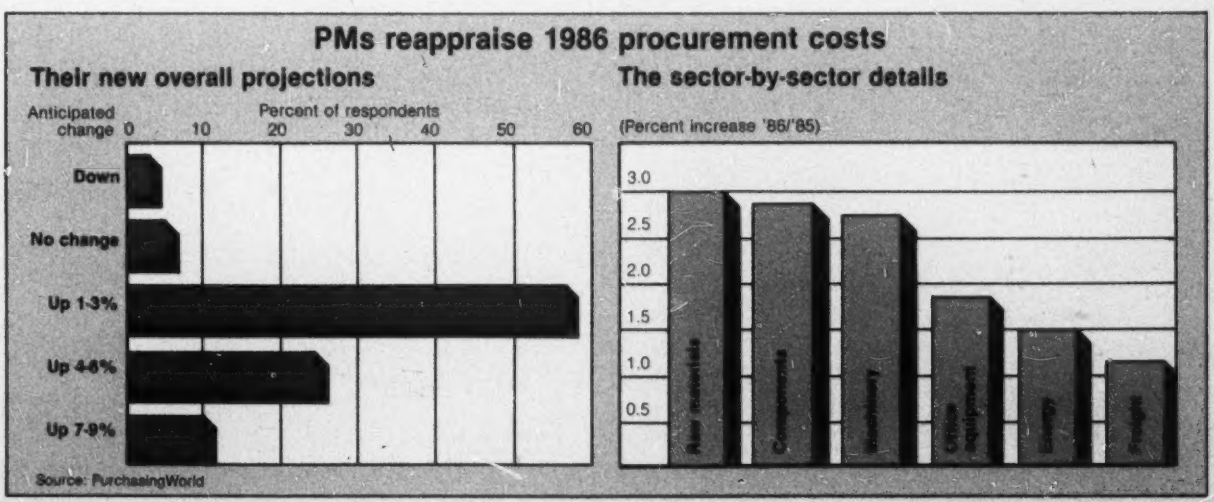
Other hold-the-line approaches include 1) more, longer-term commitments, 2) consolidation of orders from various plants and locations, 3) closer contact with vendors (especially where just-in-time deliveries are crucial), 4) aggressive negotiation—including demand for detailed cost justification, and 5) continued efforts at locating cheaper foreign sources.

On the latter score, one purchasing manager admits this might be a bit more difficult with the dollar down some 30% on a trade-weighted basis. But he adds, "I think there's enough fat in some overseas operations to allow for some additional good buys."

Still another PM says that the currency impact is being overblown for another reason. He notes, for example, that the dollar has not really weakened all that much *vis a vis* some countries such as Canada, Latin America, and even some Far Eastern countries like South Korea.

Perhaps the price outlook can be summed up by one Ohio-based purchasing executive who observes "there are few areas where we have to accept price increases these days. And while we are officially projecting a 2-3% increase in overall costs, I'm still hopeful that with a little savvy and judicious negotiation, we can hold the advance to 1-1.5%."

PW



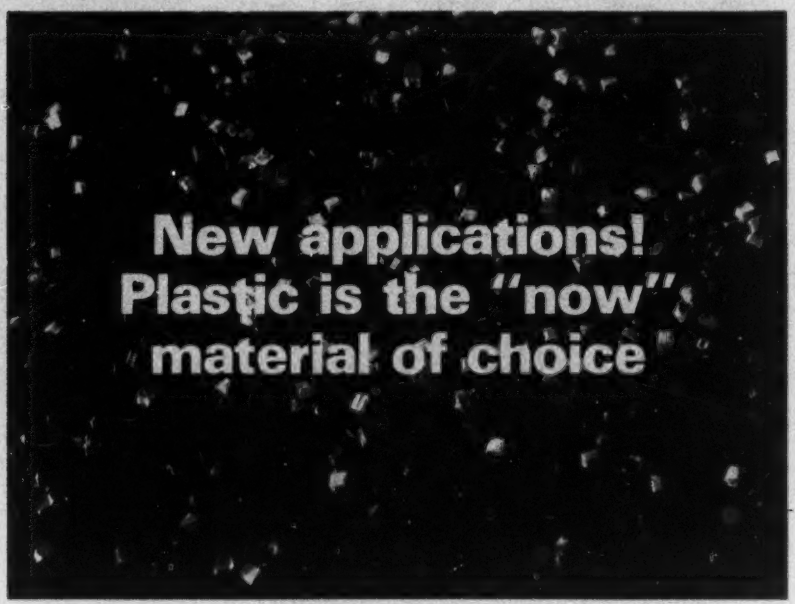


Photo courtesy of Borg-Warner

Cycolac brand ABS thermoplastic pellets from Borg-Warner Chemicals Inc. have been the material of choice for more than 25 years for housings and enclosures for consumer durable goods. Borg-Warner has developed more than 80 grades of the material including high impact, flame retardant, transparent, chrome plateable, high flow, foam, profile, and extrusion. For more information contact Borg-Warner Chemicals Inc., International Center, Parkersburg, WV 26102. Telephone (304) 424-5411.

Robert S. Reichard, executive editor

Plastics, Benjy, plastics! That line from the movie "The Graduate" has never been more appropriate than right now. Plastics are back in vogue as an alternate material of choice—especially with the recent plunge in the cost of petrochemical feedstocks.

Despite solid demand gains, however, buyers are benefitting from ample (and even more than ample) capacity and plenty of new formulations to choose from for their own cost-cutting efforts. And these buyers couldn't be happier—suppliers have failed to make 1Q price increases stick.

Innovation and growth, and, above all, price stability have thrust buyers into the driver's seats of automobiles which are increasingly being made out of plastic.

Equally significant is that there have actually been some decreases in recent months. High-density polyethylene (HDPE), polystyrene (PS), and acrylonitrile-butadiene-styrene (ABS) are all priced below average 1985 levels.

Still another sign of a buyers' market: Transaction quotes on all key commodity plastics are far under official book levels. These official lists are little more than starting points for negotiation.

There will be continuing attempts to shore up transaction prices in the months ahead. But given today's supply-demand conditions and sharp cost declines in key inputs such as ethylene, propylene, and benzene, these price boosting attempts probably won't be any more successful than those of the past few months.

What does this all add up to for 1986? While each resin will behave somewhat differently, the overall 1986 picture should look like this:

Demand

U.S. suppliers will probably be able to boost sales volume by another 4% or so—after last year's 5% advance—bringing total volume to a record near 49 billion lb.

The deceleration stems from the lower anticipated demand from construction and autos over the current year. This has to make a difference since these two industries together account for some 30% of total plastic resin consumption (25% in construction and 5% in transportation).

Some plastics will, of course, post more impressive gains this year. Engineering resins, for example, could rise by as much as 5% this year—and by at least that much in the next few years as well, and prospects appear to be bright for specialty applications such as oil cans, grocery sacks, fuel tanks, barrier packaging, and aseptic packaging.

Prices

There is no real price strength anywhere. Overall price averages are expected to drop about 1-2% this year. This weakness isn't new. Plastics in general have been rising less than 1% annually over the past five years—far less than the overall U.S. inflation rate.

The big difference between transaction and list prices also suggests that buyers are still calling most of the signals.

Some of the current large gaps prevailing:

- *Liner/film grade LDPE* now goes for 32-33¢/lb vs. a 44-45¢/lb list;
- *general purpose/crystal polystyrene* goes for 31-33¢/lb compared to a 48¢/lb list;
- *homopolymer polypropylene* (PP) goes for 33-36¢/lb vs. a 45-47¢/lb list;
- *injection molding HDPE* is now commanding 26-29¢/lb vs. a list of 45-52.5¢/lb;
- *pipe grade PVC* is 28-29¢/lb vs. a list of 44¢/lb.
- and *pipe grade ABS* 58-66¢/lb vs. 72¢/lb list.

If nothing else, all this makes plastics increasingly attractive *vis-a-vis* metals, paper, glass, and other substitution materials—many of which have been showing signs of edging higher in recent months.

Availability

Operating rates tell the story here. In the thermoplastic commodity resin sector, for example, the domestic industry is currently operating at just 85% of its potential. Moreover, 1-2% of additional capacity is expected to come on stream this year and in 1987. The result will be that

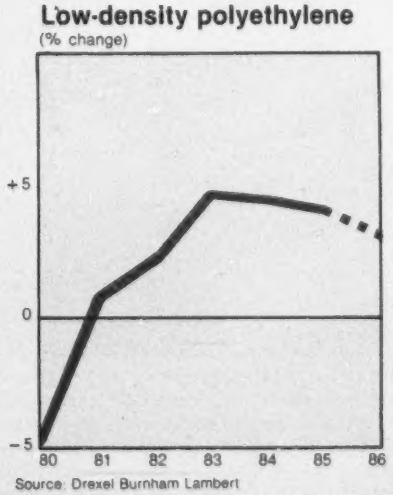
operating rates won't rise much—not nearly enough to bring about significant market tightening.

And there are plenty of imports to supplement the supply. Last year, incoming plastic resin shipments rose 16%—on top of even bigger 75% and 42% increases in 1983 and 1984. Declining exports, which now account for only 11% of total production (vs. 14% as recently as 1982), also add to overall supply availability.

For the longer run, producers in the Middle East, Canada, Mexico, and other oil-rich countries have a favorable cost position in feedstocks. These foreign sources are aggressively entering the commodity plastics field and are building up their capacity to produce high-volume plastics materials. If nothing else, this indicates tougher competition for U.S. plastics exports—even at today's lower dollar exchange rate.

But, as suggested earlier, each resin will be taking a somewhat different path this year and next. Here is a more detailed rundown on what seems to lie ahead for each of the key resin commodities and for rapidly growing engineering and reinforced plastics sectors:

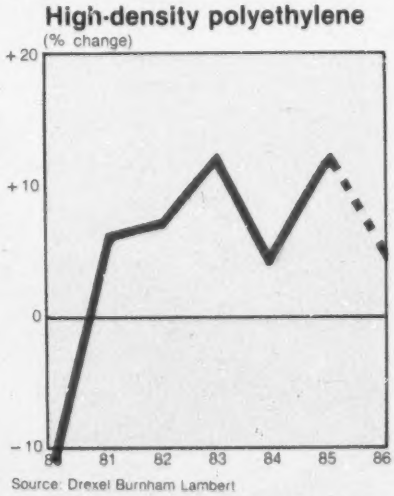
■ **Low-density polyethylene:** About a 3-4% increase in demand is anticipated this year—just a bit under the 4.5% advance racked up last year. Actually, this is one of the slowest growing of the major commodity resins—with boosts not topping the 5% mark since 1979. Capacity (which includes LLDPE/HDPE potential) seems more than adequate. Last year's 86% rate will advance to about 88% in 1986.



Source: Drexel Burnham Lambert

Film, mostly for packaging, remains the major market, with 56% of the total supply going for this purpose. Exports (12% of total demand) are also an important factor. New developments include the expected introduction of ultra-low density formulations—types said to exhibit excellent flexibility, sealability, and cold-temperature impact.

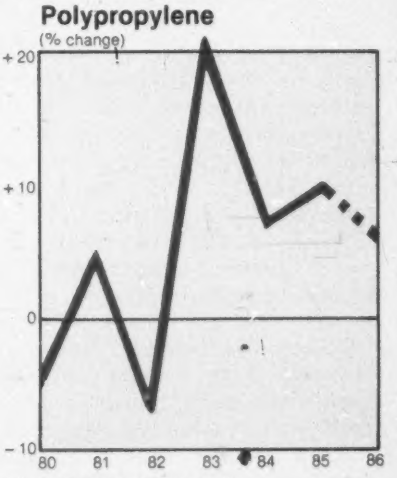
■ **High-density polyethylene:** This is one of the fastest growing commodity resins—with about a 5% advance seen for this year—on top of 1985's better than 11.5% increase. Suppliers are quite snug here too—with near full-capacity operating rates expected for 1986. But additional supplies are available from swing LLDPE/HDPE plants—and this may be why prices remain shaky. Additional Canadian and Saudi Arabian capacity also would seem to assure a problem-free situation.



Source: Drexel Burnham Lambert

Injection molding applications sported the biggest gains last year—advancing more than 20%. On a product basis, demand continues strongest in such areas as oil cans and plastic grocery sacks. Potential also exists in fuel tanks and large 55-gallon drums. And, as is the case with LDPE, more grades are expected to hit the market, aimed at such diverse end-use applications as oil cans, milk bottles, juice containers, boil-in-bags, shipping drums, and snack packaging.

■ **Polypropylene:** The failure of a recent price increase to hold and recent cost declines in propylene indicate continued easy prices through summer. Quotes will hover in the mid-30s. Demand, on the other hand, looks bullish. About 5.6 million lb are expected to clear the market this year—up 7% from 1985 levels. Operating rates, at 94%, are well above the all-plastics average. But a substantial 5-6% capacity expansion is expected this year.



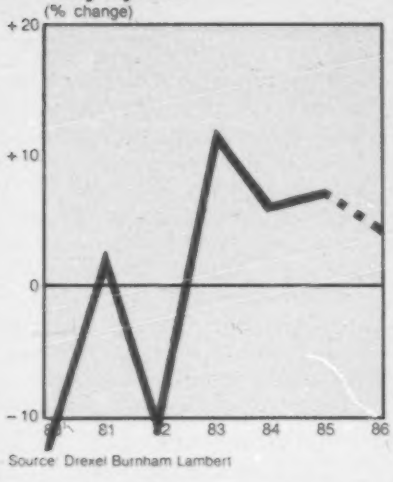
Source: Drexel Burnham Lambert

The longer-term demand outlook is fairly bouyant—as this plastic makes new inroads in such areas as blown bottles that replace glass, and in extruded barrier containers which are replacing tin cans. Technological developments have yielded new formulations that are cleaner, tougher, more consistent, more thermally stable, and less costly.

■ **Polystyrene:** Even with the market at its seasonal peak, there is still more-than-ample capacity to meet demand which is expected to rise by a moderate 4-5% (into the 4.3 million lb range) in 1986. In any case, overall 1986 operating rates are not expected to climb much above the low 70s level over the current year. It is not surprising that the 4¢/lb price increase of earlier this year has not stuck. And many buyers now say quotes are lower than they were late last year.

These same buyers are also looking for many upgraded resins that

Polystyrene

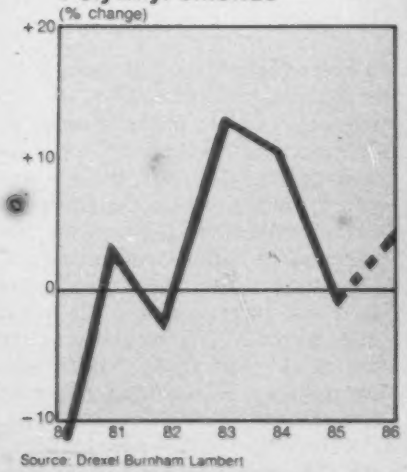


Source: Drexel Burnham Lambert

promise vastly improved processability, increased strength, and higher gloss levels. They should also allow this workhorse resin to compete better in higher-performance markets. More specialty and clean crystal grades (which reduce residual monomer by more than 50%) are also being developed.

■ **Polyvinyl chloride:** Some improvement in demand over last year's basically flat pattern is almost certain. Recent buying, boosted by a strong seasonal surge in construction (the resin's biggest market) is currently running well above year-ago levels. Nevertheless, prices have also slipped here over the past month—with pipe grade material fetching only 28-29¢/lb, not that much above the mid-20 low of late last year.

Polyvinyl chloride



Source: Drexel Burnham Lambert

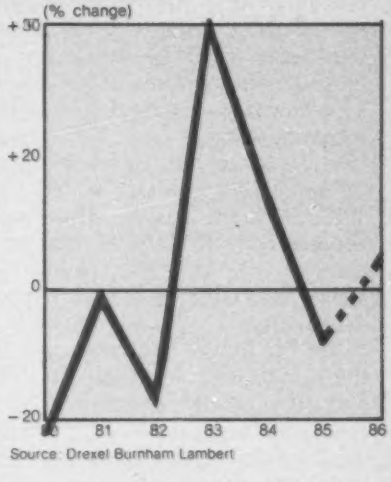
As for the rest of the year, demand gains could slow down to the point where the annual advance is likely to average out at about 3-4%. Current capacity remains adequate, although a modest advance into the low 80s range is likely this year on a combination of demand gains and an expected 2% drop in production potential.

On the production front, producers are expected to come out with new blends, alloys, and specialized compounds—most of them designed to allow the resin to compete in high performance applications. Some of these include new bottle compounds, and glass-filled PVC compounds. Also look for the introduction of new utility-grade compounds priced below conventional pellets.

■ **ABS resins:** This plastic is coming off a disappointing 1985 when overall shipments dropped by 8%, Behind this decline in domestic buying: an import wave of ABS containing appliances, autos, and electronic machines. This year, however, the industry should return to the plus column. The gain, held back by imports, should only be about 4%.

Prices here have been weakening —with 2-3¢/lb discounts recently initiated on several grades. This stems

ABS resins



Source: Drexel Burnham Lambert

not only from lackluster demand patterns, but also from a huge supply glut which is likely to get even bigger in the next few quarters. Points to keep in mind here: A huge 13% increase in production potential is scheduled to come on stream this year—this should drop the overall industry operating rate into the 65-68% range. And still more capacit another 8% or so, is scheduled for 1987.

These capacity expansions are attempts to meet lower-cost Far-East competition by using bigger and more efficient plants. These moves

A composite from ARCO Chemical Company demonstrates the wide use of chemicals and plastics on the modern automobile. Featured at the recent SAE Exposition, the car highlighted more than 30 current production parts and conceptuul components representing the company's line of engineering resins, foamable materials, oxygenated fuels, specialty chemicals, and advanced materials.

will also bring in new types of resins—with special emphasis on automotive applications requiring low gloss and high heat resistance.

■ **Engineering resins:** The demand outlook remains rosy. All in all, about a 5% increase in usage is expected this year—with PET/PBT resins (up 8% in 1985) again expected to spearhead the advance. That should be enough to push totals for engineering resins into the 1.2 billion lb range. And acceleration after that (8% a year on average) could mean that as much as 1.8 billion lb could be clearing the market by 1991.

Much of the optimism is based on hopes of more use in autos. A DuPont spokesperson, for example, talks of increased use in body parts, under-the-hood applications, and bumpers. A spokesperson from Celanese adds that transportation uses overall will increase from 30% of the market to 33% in the six-year period ending 1991 (vs. only 25% currently).

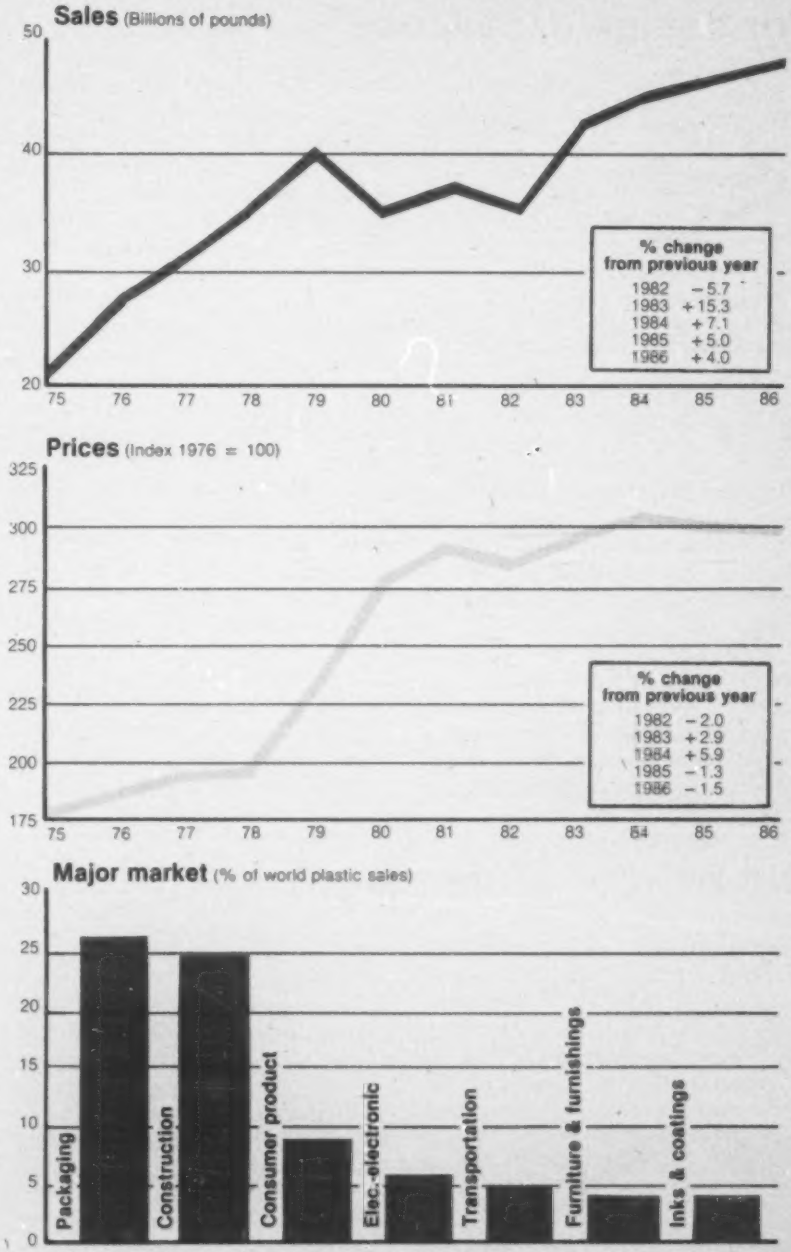
Product innovation is, of course, the major factor in all those growth forecasts. Over the past two years, for example, some 200 new resins have been introduced. And a lot more are anticipated—all aimed at penetrating traditional metal markets by offering products with high degrees of structural strength or rigidity, improved stress qualities, and better resistance to hostile environments.

■ **Reinforced plastics:** Growth has slowed down a bit here following the big 12% jump recorded in 1984. According to the Reinforced Plastics/Composite Institute, last year's increase was only slightly in excess of 3%. A similar modest gain in 1986 should bring totals up to near the 2.3 billion lb mark.

Transportation (579 million lb), construction (454 million lb), and marine applications (347 million lb) are again expected to dominate demand this year. The fastest-growing area will be aircraft, where a projected 15% gain will bring usage here up to 37 million lb. Faster-than-average growth (4.2%) is also seen for electrical and electronic markets, where totals are expected to approach 200 million lb this year.

In the longer run, most experts look for accelerated growth—well above the GNP rate. Business Communications, a research outfit, says that technological breakthroughs will have a major impact on the fast-growing aerospace market. Other high growth sectors singled out by the firm's analysts include appliances, business machines, and various consumer products. On the latter score, they estimate that by 1995, one-third of all GM passenger cars will be equipped with plastic exterior panels. ***PW***

Plastic resins: A market overview



Source: Society for the Plastics Industry, Bureau of Labor Statistics, PW estimate

NOTE

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